REMARKS

The claims stand rejected under 35 USC §103 over newly cited art, namely over Han (US6485587) in view of Svenson (US4368065), and in further view of Godsey (US4298411).

The applicant respectfully traverses the rejection as follows:

Han describes a process for coating crystals for plastic-bound explosives. The reference describes bimodal RDX mixtures formed in a water slurry process. The reference does not, however, discloses the particle size distributions claimed in the current invention.

Svenson describes a method for precipitation recrystalization of HMX and RDX crystals. The reference discloses resulting crystal sizes in the range 10 – 250 μm. While the examiner contends that examples 1, 3 and 4 show a bimodal mixture with crystal sizes of 10 and 70 μm, this is respectfully believed to be a misreading of the reference. The cited examples do not disclose bimodal mixtures at all, but merely discuss the size of the individual particles that result from the particular precipitation method. As such, Svenson discloses nothing more than the existence of different particle sizes of HMX or RDX. Svenson does not relate to pressable explosives, and contains no disclosure or suggestion regarding specific bimodal size distribution of particles in a pressable explosive, much less any suggestion that the particular size distribution claimed in the current invention would give the extremely surprising degree of pressability achieved by the inventors.

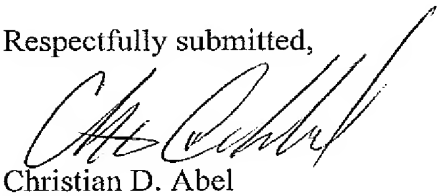
Godsey describes a smoke-free propellant. While the reference does disclose a bimodal mixture, the reference does not disclose a pressable explosive compound, and contains no suggestion that the surprising degree of pressability achieved by the inventors would result from the size distribution claimed.

As discussed previously, and specifically in the declaration of explosives expert Gunnar Nevstad, the use of bimodal mixtures was well known in the art, and HMX has been available in a wide range of particle sizes for nearly as long. Despite the availability of these particle

sizes, the generally assumed prejudice in the art was that pressability above 98% TMD (theoretical maximum density) was not possible using reasonable pressures. Despite this prejudice, the inventors have surprisingly discovered a specific size distribution that when used in a pressable explosive results in pressability significantly above this level (as discussed, even numerically "small" increases above 98% are actually very significant in the art). According to the declararnt, the degree of pressability achieved by the inventors was remarkable and unexpected. It is respectfully believed that the achievement of the current invention, in the face of the availability of the particle sizes and the highly desirable benefits of increased pressability, is one of the secondary indicia of non-obviousness that argues heavily in favour of patentability. Together with the fact that the art teaches away from the invention, it is respectfully believed that the examiner has not identified any motivation or suggestion to employ the claimed particle size distribution in a pressable explosive compound. Given that the secondary references do not even deal with pressable explosives, it is believed that they do not supply the needed motivation or suggestion to use the claimed specific particle sizes in a pressable explosive, and fail to provide one skilled in the art with any reasonable expectation of success in achieving a pressability significantly greater than 98% TMD.

Based upon the foregoing, reconsideration of the rejection is requested.

Respectfully submitted,



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